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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,948	09/30/2003	Harold N. Rosenstock	IS01406MCG	7863
23330	7590	11/28/2006	EXAMINER	
MOTOROLA, INC. LAW DEPARTMENT 1303 E. ALGONQUIN ROAD SCHAUMBURG, IL 60196			WHIPPLE, BRIAN P	
			ART UNIT	PAPER NUMBER
			2196	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/676,948

Applicant(s)

ROSENSTOCK ET AL.

Examiner

Brian P. Whipple

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/30/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-29 are pending in this application and presented for examination.

### *Specification*

2. The abstract is objected to because it contains identification numbers such as "(200)." See MPEP § 608.01 (b). Appropriate correction is required.

3. The specification is objected to because it lacks a brief summary of the invention.

Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

Appropriate correction is required.

4. The specification, page 1, is objected to as it includes information under "Related Cases" that must be updated. Appropriate correction is required.

5. The specification, page 11, line 21 is objected to because reference item 529 is discussed in the description of figure 4. It may have been intended to refer to item 429. Appropriate correction is required.

6. The specification, page 11, line 22 is objected to because reference item 17 is discussed in the description of figure 4 and no such item exists. It may have been intended to refer to item 417. Appropriate correction is required.

7. The use of the trademark InfiniBand™ has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson, U.S. Publication No. 2004/0190546 A1, in view of Albert et al. (Albert), U.S. Patent No. 6,549,516 B1.

10. As to claim 1, Jackson discloses a method, comprising: providing an InfiniBand architecture subnet ([0020], lines 1-6);

a master subnet manager function managing the InfiniBand architecture subnet, wherein the master subnet manager function is located at a first node of the InfiniBand architecture subnet ([0021], lines 6-7);

the master subnet manager function migrating to a second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose an active general service manager function managing a service, wherein the active general service manager function is located at the first node;

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function.

However, Albert does disclose an active general service manager function managing a service, wherein the active general service manager function is located at the first node (Figure 2A, item 241; Column 7, lines 8-12);

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by migrating a service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61) and to provide management functions within a single node.

11. As to claim 7, Jackson discloses a method, comprising: providing an InfiniBand architecture subnet ([0020], lines 1-6);

a master subnet manager function managing the InfiniBand architecture subnet, wherein the master subnet manager function is located at a first node of the InfiniBand architecture subnet ([0021], lines 6-7);

the master subnet manager function migrating to a second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose co-locating an active general service manager function at the first node with the master subnet manager function;

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function.

However, Albert does disclose co-locating an active general service manager function at the first node with the master subnet manager function (Figure 2A, item 241; Column 7, lines 8-12; it may be interpreted that an administrator may set the service manager and subnet manager on the same node);

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by migrating a service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61) and to provide management functions within a single node.

12. As to claim 13, Jackson discloses an InfiniBand architecture subnet ([0020], lines 1-6), comprising:

- a first node ([0020], lines 6-10);

- a second node coupled to the first node ([0020], lines 6-10);

- a master subnet manager function located at the first node ([0021], lines 6-7);

- the master subnet manager function migrates to the second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose an active general service manager function located at the first node, wherein when the master subnet manager function migrates to the

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second node, the active general service manager function migrates to the second node to co-locate with the master subnet manager function.

However, Albert does disclose an active general service manager function located at the first node (Figure 2A, item 241; Column 7, lines 8-12),

wherein when the master subnet manager function migrates to the second node, the active general service manager function migrates to the second node to co-locate with the master subnet manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers, when the first node fails both the service manager and subnet manager will become active on the same preferred backup node).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by migrating a service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61) and to provide management functions within a single node.

13. As to claim 16, Jackson discloses an InfiniBand architecture node ([0020], lines 1-6), comprising:

a master subnet manager function, wherein the master subnet manager function migrates to the InfiniBand architecture node ([0021], lines 9-13; [0005], lines 5-8; it may



be interpreted that the subnet manager migrates as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose a general service manager residing at the node; when the master subnet manager function migrates to the node, the general service manager assumes an active general service manager function.

However, Albert does disclose a general service manager residing at the node (Figure 2A, item 241; Column 7, lines 8-12);

when the master subnet manager function migrates to the node, the general service manager assumes an active general service manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers, when the first node fails both the service manager and subnet manager will become active on the same preferred backup node).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by causing a backup service manager to become an active service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61).

14. As to claim 18, Jackson discloses a method, comprising: a master subnet manager function managing an InfiniBand architecture subnet from a first node ([0021], lines 6-7);

migration of the master subnet manager function from the first node to a second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose an active general service manager function managing a service within the subnet from the first node;

and the active general service manager function following migration of the master subnet manager function from the first node to a second node.

However, Albert does disclose an active general service manager function managing a service within the subnet from the first node (Figure 2A, item 241; Column 7, lines 8-12);

and the active general service manager function following migration of the master subnet manager function from the first node to a second node (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers, when the first node fails both the service manager and subnet manager will become active on the same preferred backup node).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by migrating a service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61) and to provide management functions within a single node.

15. As to claim 21, Jackson discloses a method, comprising: a master subnet manager function managing an InfiniBand architecture subnet from a first node ([0021], lines 6-7);

the master subnet manager function moving to the second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose a general service manager residing at a second node in the subnet;

and the general service manager assuming an active general service manager function.

However, Albert does disclose a general service manager residing at a second node in the subnet (Figure 2A, item 241; Column 7, lines 8-12);

and the general service manager assuming an active general service manager function (Column 10, lines 57-67; Column 20, lines 55-61; the backup service manager becomes the active service manager when the original active service manager fails).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by causing a service manager to become an active service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61).

16. As to claim 23, Jackson discloses a method, comprising: a master subnet manager function managing an InfiniBand architecture subnet, wherein the master subnet manager function is distributed among a plurality of nodes ([0021], lines 9-13; multiple nodes may be assigned as subnet managers, the slaves are potential masters, and thus it may be interpreted that the master subnet manager function is distributed among a plurality of nodes);

migration of the master subnet manager function to a node, wherein the node is separate from the plurality of nodes ([0005], lines 5-8; it may be interpreted that the service processor is a node outside the plurality of assigned subnet managers).

Jackson does not disclose an active general service manager function managing a service within the subnet from one of the plurality of nodes;

and the active general service manager function following migration of the master subnet manager function to a node, wherein the node is separate from the plurality of nodes.

However, Albert does disclose an active general service manager function managing a service within the subnet from one of the plurality of nodes (Figure 2A, item 241; Column 7, lines 8-12);

and the active general service manager function following migration of the master subnet manager function to a node, wherein the node is separate from the plurality of nodes (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the

subnet managers, when the first node fails both the service manager and subnet manager will become active on the same preferred backup node).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Jackson by migrating a service manager as taught by Albert in order to provide fail over (Albert, column 10, lines 59-61).

17. As to claim 24, Jackson discloses a computer-readable medium containing computer instructions for instructing a processor to perform a method of migrating an active general service manager function, the instructions comprising: a master subnet manager function managing the InfiniBand architecture subnet, wherein the master subnet manager function is located at a first node of the InfiniBand architecture subnet ([0021], lines 6-7);

the master subnet manager function migrating to a second node ([0021], lines 9-13; [0005], lines 5-8; it may be interpreted that the subnet manager migrates to a second node as the delegation of the master subnet manager and the slave subnet managers changes).

Jackson does not disclose an active general service manager function managing a service within the subnet, wherein the active general service manager function is located at the first node;

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function.

However, Albert does disclose an active general service manager function managing a service within the subnet, wherein the active general service manager function is located at the first node (Figure 2A, item 241; Column 7, lines 8-12);

and the active general service manager function migrating to the second node to co-locate with the master subnet manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to correspond with the master/slave preferred order of the subnet managers, when the first node fails both the service manager and subnet manager will become active on the same preferred backup node).

18. As to claims 2, 8, 14, 17, 19, 22, and 25, Jackson discloses the master subnet manager function migrating comprises a standby subnet manager at the second node assuming the master subnet manager function ([0021], lines 9-13; [0005], lines 5-8; [0044], lines 1-3; [0045], lines 1-3; [0049], lines 1-3).

19. As to claims 3, 9, 15, 20, and 26, Albert further discloses the active general service manager function migrating comprises a general service manager at the second node assuming the active general service manager function (Column 10, lines 57-67; Column 20, lines 55-61; the precedence field may be used to set a preferred order of backup service managers, it may be interpreted that these values may be set to

correspond with the master/slave preferred order of the subnet managers, when the first node fails the service manager at the backup node will assume an active role).

20. As to claims 4, 10, and 27, Jackson discloses the master subnet manager function managing comprises the master subnet manager function discovering a topology of the InfiniBand architecture subnet {[0020], lines 1-6; it is inherent that the subnet manager will discover the topology of the subnet in an InfiniBand™ architecture subnet, as supported by page 706, lines 11-15 of InfiniBand™ Trade Association, InfiniBand Architecture Specification Volume 1, 11/06/02, InfiniBand™ Trade Association, Release 1.1 (Hereafter InfiniBand™)}.

21. As to claims 5, 11, and 28, Jackson discloses the master subnet manager function managing comprises the master subnet manager function assigning a local identifier ([0020], lines 1-6; it is inherent that the subnet manager will assign a local identifier in an InfiniBand™ architecture subnet, as supported by page 706, lines 16-17 of InfiniBand™).

22. As to claims 6, 12, and 29, Jackson discloses the master subnet manager function managing comprises the master subnet manager function managing changes in a topology of the InfiniBand architecture subnet ([0020], lines 1-6; it is inherent that the subnet manager will manage changes in the topology in an InfiniBand™ architecture subnet, as supported by page 706, lines 19-21 of InfiniBand™).

**Summary**

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571)270-1244. The examiner can normally be reached on Mon-Thu (7:30 to 5), Fri (7:30 to 4 or day off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571)272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPW

Brian P. Whipple  
11/20/06

  
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SUPERVISORY PATENT EXAMINER